



OF SOUTHPORT.

REPORT

UPON THE

HEALTH & SANITARY CONDITION

OF THE

County Borough of Southport,

FOR THE YEAR 1905,

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County Borough of Southport.

1905.

Southport is situated on the north-west coast of Lancashire, and is about five miles to the south of the Ribble Estuary, 20 miles to the north of Liverpool, and about 40 miles by rail from Manchester. Aspect, north-west.

Site and Soil.—The district is for some miles around a flat one, with sandy soil. The houses, except the business premises in the centre of the town, are mostly detached or semi-detached, with large gardens. The streets are broad, and many of them planted down both sides with trees.

There are in the Borough many large **Institutions**, such as the Southport Infirmary, several Convalescent Hospitals and Homes, Sanatoria, a large number of Schools, and a considerable number of Hotels (both large and small).

The Water Supply is obtained from deep wells near Ormskirk, about eight miles from Southport, belonging to the Southport, Birkdale, and West Lancashire Water Board, and is, though rather hard, of exceptional purity. The hardness is principally due to carbonate of lime, and is removed to a considerable extent by boiling.

Drainage is by gravitation into the sea, the sewer outlet being about three miles to the north of the town. Steam pumping has been made use of to a small extent at the outlet for some years in connection with some small bacterial filter beds, but a new and extensive scheme for pumping and the treatment of the sewage at the outlet is now being carried out.

Population of Southport at Census, 1901	48,083
Estimated Population at middle of 1905	51,107
Area of Borough (excluding Foreshore, 6,824 acres) in acres	4,233
Birth-rate, per 1,000 living, in 1905	18.02
Death-rate ,, ,, excluding deaths of visitors	12.03
Gross Death-rate	13.58
Death-rate from the seven principal Zymotic Diseases	.43
Deaths of Infants under one year of age per 1,000 births	114

Date of Incorporation, June, 1867.

TO THE CHAIRMAN AND MEMBERS

OF THE

HEALTH COMMITTEE OF THE COUNTY BOROUGH OF SOUTHPORT.

GENTLEMEN,

The population of Southport, as estimated by the Registrar General to the middle of the year 1905, was 51,107.

Assuming the proportion of males and females in the population to have remained the same as at the time of the Census in 1901, the respective numbers of each sex in 1905 were as follows:—

These figures give the proportion of males to females as 100 to 142, and show an excess of females over males of 8,913.

The births registered in Southport during the year were 921 in number, of which 478 were males and 443 females. The resulting birth-rate was 18.02 per 1,000, which is a little above the rate for last year, when it was 17.51 per 1,000, but is 2.6 per 1,000 below the average for the last ten years. This rate in Southport was at the highest point of which we have any record in 1877, when it was 33.87 per 1,000. Since that date, with slight fluctuations, it has gradually but steadily fallen to its present figure. The birth-rate for the country generally in 1905 was 27.2 per 1,000.

The number of deaths which occurred in the Borough, and in the Borough Infectious Diseases Hospital in Moss Lane (which, although situated just beyond the Borough boundary, is counted for the purposes of this report as being within the boundary), was 694, of which 325 were of males and 369 of females. These figures give a gross death-rate of 13.58 per 1,000 of the population, against 14.29 in the previous year, and again, for the fourth year in succession, give a rate which is the lowest previously recorded in the Borough. The average gross death-rate for the previous ten years was 16.12 per 1,000.

If from the above 694 deaths, 79 deaths of visitors who came into the town in a precarious state of health, and died after only a short stay here, be deducted, we have 615 deaths, from which by calculation is obtained a "local" death-rate of 12.03 per 1,000, which is also the lowest ever previously recorded.

To the 694 deaths, however, which occurred in the Borough, and which include six deaths which occurred in the Borough Infectious Diseases Hospital, should be added 26 deaths of persons belonging to Southport which occurred in the Ormskirk

Workhouse, making a total of 720 deaths. After deducting from these the 79 deaths of moribund visitors who did not belong to Southport, we have 641 deaths which strictly belong to the Borough. The death-rate calculated on these 641 deaths is 12.54 per 1,000, and this rate, which is perhaps the most correct indication of the actual mortality of the Borough it is possible to obtain, is also the lowest ever previously recorded.

The 79 visitors who came into the Borough in a more or less moribund condition were, though rather more in number than in the previous year, yet about the average for the last few years. The principal causes of death of these visitors in numerical importance were as follows:—Heart Disease (18 deaths), Consumption of Lungs (10 deaths), Cancer (6 deaths), Cerebral Apoplexy (5 deaths), and Pneumonia (5 deaths).

The average length of stay in Southport of these cases was 68 days, and varied from a little under twelve months—the longest period of residence of any one of these visitors before death—to one day in other cases.

The Zymotic death-rate—or, in other words, the death-rate from the seven principal Zymotic diseases, viz., Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever, and Diarrhœa—was .43 per 1,000, which is the lowest Zymotic death-rate ever previously recorded. The nearest approach in the past to this low rate was in 1886, when the rate was .57 per 1,000. The average for the ten years previous to 1905 was .98 per 1,000.

To sum up briefly the preceding paragraphs, it is highly satisfactory to be able to report that each of the following death-rates—viz., the gross death-rate, the local death-rate, the corrected death-rate, and the Zymotic death-rate—was the lowest on record.

CONSUMPTION OF THE LUNGS.

The number of deaths in the Borough caused during the year 1905 by Consumption of the Lungs was 60, which is a somewhat higher figure than in the previous year and than has obtained for the last few years—in fact, since the year 1900. The following figures, taken from Table IV. at the end of this and previous reports, show the number of deaths from the disease, and other forms of tubercular disease which have occurred during the last five years:—

Year.		Deaths fro	m oth	of Deaths er Tuberc Diseases.	ular	all f	Deaths from forms of ular Disease.
1900	• • • • • • • • • • • • • • • • • • • •						85
1901	* * * * * * * * * * * * * * * * * * * *	54		19			73
1902		40		25			65
1903	• • • • • • • • • • • • • • • • • • • •	37		19			56
1904	• • • • • • • • • • • • • • • • • • • •	56		22			78
1905	* * * * * * * * * * * * * * * * * * * *	60		14			74

It will be noticed that from the year 1900 to the year 1903 there was a marked decrease annually in the number of cases of Consumption of the Lungs, but that during the last two years this decrease has been checked. It seems to me, possibly, that the less marked attention which has been given to the subject in the press, in public lectures, and at public meetings called for the purpose of drawing public attention to the great loss of life annually from these diseases, has caused the public themselves to be less careful about the matter, and to lessen their appreciation of the absolute necessity of fresh air in houses, public buildings, and workshops if these diseases are to be kept more in check.

Notices against spitting continue to be put up in our trams, railway stations, and other places, and have done something to check this most objectionable habit. Our milk supply is also constantly kept under observation to prevent the milk of tuberculous cows being sold in the Borough.

After a death from these diseases an offer is made from the Health Department to disinfect gratuitously any rooms that have been previously occupied by the deceased person, and also any clothing that he or she may have used. These offers of disinfection are accepted to some extent by the public, but not to as great an extent as is desirable. The voluntary notification also of Consumption of the Lungs has been adopted in Southport since 1901, but so far has been very little used, no case having been notified during the year.

The deaths from Consumption of the Lungs were pretty evenly distributed over the Borough, as will be seen from the following list of streets and roads in which they occurred:—Birch Street (3 deaths), Linaker Street (3 deaths); Chester Road, Clifton Road, Curzon Road, Heysham Road, Part Street, Tithebarn Road, and Sefton Street (2 deaths each). No other street had more than a single death from this disease during the year. Out of eight cases belonging to Southport which occurred in the Ormskirk Workhouse, four could not be referred to any specific address in Southport.

The following Table gives the comparative rates for the different divisions of the Borough. The birth-rate, it will be seen, is highest (viz., 30.92 per 1,000) in the Scarisbrick and Sussex Wards, which are principally occupied by the working classes; and the lowest birth-rate (viz., 5.61 per 1,000) in Park Ward, a Ward chiefly occupied by retired people. The death-rate, it will be seen, is highest in the Scarisbrick and Sussex Wards, and lowest in Park Ward.

TABLE SHOWING COMPARATIVE RATES FOR DIFFERENT PARTS OF THE BOROUGH

(Calculated on the nett figures for the five years, 1901 to 1905 inclusive, as given in Tables II. and IV., at the end of this and previous Reports).

	Average Popu- lation.	Birth Rate (per 1000 of population).	Death Rate (per 1000 of population).	Infantile Death Rate (per 1000 Births).	Cancer Death Rate (per 1000 of population).	Consumpti'n of Lungs Death Rate (per 1000 of population).
The Six Central Wards, or the business portion of the Borough		15.31	14·98	143	1.14	1.02
Scarisbrick and Sussex Wards combined, especi- ally a working-class district	11,249	30.92	1 5· 61	. 142	.85	, I ' IO
Park Ward, a wealthy residential Ward	5,166	5.61	11.96	96	1.39	•62
Hesketh Ward, including Churchtown and Crossens, the most rural Ward in the Borough	4,063	23.33	14.67	118	·84	•64

INFANTILE DEATH-RATE.

The number of Infants under the age of twelve months who died in the Borough during the year 1905 was 105, out of 921 registered births. This is equivalent to a rate of 114 per 1,000 births, which is a distinct improvement on the rate for the previous year, which was 130 per 1,000, and is also with one exception—viz., a rate of 100 per 1,000 in 1881—the lowest infantile death-rate yet recorded. The average rate for the previous ten years was 146 per 1,000.

The principal causes of these deaths, as shown in Table V. at the end of this Report, were as follows:—General Debility and Atrophy (24 deaths), Premature Birth (15 deaths), Enteritis (12 deaths), Convulsions (10 deaths), and Pneumonia (7 deaths).

The streets or roads in which most of these deaths occurred were as follows:—Shakespeare Street (7 deaths), Boundary Street (4 deaths), Land Lane, Crossens (4 deaths), Clifton Road (4 deaths), Poulton Road (4 deaths), St. Luke's Road (4 deaths), Eastbank Street (3 deaths), Newton Street (3 deaths), and Wennington Road (3 deaths).

The last Table shows that this Infantile death-rate varies considerably in different parts of the Borough., viz., from a rate of 143 per 1,000 in the Central Wards, and 142 per 1,000 in the Scarisbrick and Sussex Wards, to a rate of 118 per 1,000 in Hesketh Ward and a rate of 96 per 1,000 in Park Ward. The only apparent reason for this marked difference between Park Ward and the other Wards of the Borough is that the parents in Park Ward are more experienced probably, and more able to provide better attention for their children, when delicate or ill, than are some of the parents in the other Wards. There are no sanitary disadvantages or defects about the houses or surroundings of any one part of the Borough when compared with another which would otherwise account for it.

During the year, as in previous years, Pamphlets containing Instructions on the Care and Feeding of Infants have been printed and sent out by post to every house in the Borough where a birth has taken place, and, judging from the frequent inquiries for them, this assistance seems to have been appreciated. In addition, towards the end of the year arrangements were made with the District Nursing Society whereby, on the payment by the Corporation to the Society of an annual subscription of £50, the Society would provide a Nurse, whose duty it would be to visit at her discretion all houses where births have recently taken place, and give any help or advice that she thought desirable or necessary. This Nurse commenced her duties at the commencement of the present year, and so far the arrangement appears to be working quite smoothly and satisfactorily. The nurse's visits are being well and often gratefully received, and I have no doubt whatever that they will result in a marked reduction in the death-rate of these young children.

INFECTIOUS DISEASES HOSPITAL.

This Hospital contains accommodation in the ordinary wards for 48 patients. In addition, there is a special Pavilion, containing ten beds, erected for and maintained by the Private Schools of the Borough, and there is also a special Pavilion on another site, with twelve beds, for Smallpox. With the exception of some of the older portions becoming slightly dilapidated from age, all these buildings are in good

sanitary condition. Some extra accommodation in the way of provision for Diphtheria cases, and also for doubtful cases which occasionally arise and which require separate isolation until their nature is made evident, is being considered, and a lease for some additional land around the present site is being obtained.

INFECTIOUS DISEASES.

The diseases now compulsorily notifiable in Southport include Measles, Whooping Cough, and Chicken Pox, in addition to those ordinarily notifiable. Consumption of the Lungs is also voluntarily notifiable.

During the year the following cases of Infectious Disease were notified in the Borough:—

Scarlet Fever	247	cases, as	against	333	cases notified	in 1904.
Diphtheria			,,	36	25	"
Typhoid Fever	10	,,	,,	10	,,	"
Erysipelas	22	,,	,,	32	,,	"
Puerperal Fever		,,	,,	I	,,	"
Chicken Pox			,,	217	,,	,,
Measles		,,	,,	504	,,	,,
Whooping Cough	70	,,	",,	233	"	"

Of the above, the following cases were removed to Hospital:—Scarlet Fever, 177 cases; Diphtheria, 11 cases; and Typhoid Fever, 2 cases.

SMALLPOX.

During the year there were no cases of this disease in the Borough.

SCARLET FEVER.

Though the number of cases of this disease in the Borough, viz., 247, was rather less than the number during the previous year, which was 333, it was above the average of 226 for the last ten years. Although comparatively of a very mild type, as shown last year by a case death-rate in Southport of 2.96 per cent., this disease continues to prevail in spite of all efforts to check it. It is a disease which appears to be especially prevalent in the North of England, and particularly in Lancashire. Within the last few years, on one or two occasions, we have in Southport got the numbers of cases reduced until there have been only five cases in the Hospital, and none nursed elsewhere in the Borough, and yet in a few weeks' time afterwards isolated cases have cropped up in widely different parts of the Borough, and it has been quite impossible to trace these cases either to infectious visitors coming into the town or to any previous cases in the Borough. It seems to me that at times there must be cases of Scarlet Fever among the community of so mild a character that they are never detected either by the individual himself or anyone else, but that they are a source of infection to others.

A recent case of this nature will illustrate this statement. A servant girl in a large establishment had a little sore throat for a few days, and though most carefully watched daily by a medical man who was on his guard against the case being one of

Scarlet Fever, no further symptoms were detected. About a week afterwards a fellow servant became ill, and showed the usual symptoms of well-marked Scarlet Fever, such as sore throat, red rash, etc. At this point I was asked to see both of the girls, and I found even then no definite evidence that the first girl had had Scarlet Fever. She was, however, isolated on suspicion, and in a few more days' time she showed some evidence of peeling. Had this first case been even a trifle less pronounced, or had the two cases not been living together in the same house, the difficulty of connecting the one case with the other would have been made much more difficult, if not impossible. As accounting for the continuance of the disease among the community, it seems to me quite possible that there may be many more such cases in existence the nature of which is never suspected, but which nevertheless act as a continual source of infection.

DIPHTHERIA AND MEMBRANOUS CROUP.

The number of cases notified was 31, which is practically the same as the average of 32 for the last ten years. Of these cases, five were unfortunately fatal.

The following Table shows the total number of notifications which have occurred since these diseases were made compulsorily notifiable by the Infectious Diseases Act of 1889:—

DIPHTHERIA AND MEMBRANOUS CROUP.

		Total Notifications.			Total Deaths.			n the Hospital.	Deaths in Hospital.
1890	• •	•••••	. 53		17	• • • • • • • • • • • • • • • • • • • •	4	• • • • • • • •	0
1891	• •	• • • • • • • • • • • • • • • • • • • •	. 27		4	• • • • • • • • •	I	• • • • • • • •	0
1892			. 22	• • • • • • • •	ΙΙ		0	• • • • • • • • •	0
1893			. 36	• • • • • • • • • • • • • • • • • • • •	6		I	• • • • • • • •	0
1894		• • • • • • • • • • • • • • • • • • • •	. 39		I 2		0		0
1895	٠.		. 17		3		I	• • • • • • • • •	0
1896		• • • • • • • • • • • • • • • • • • • •	. 27	• • • • • • • •	5		2	• • • • • • • • • • • • • • • • • • • •	0
1897	• •	• • • • • • • • • • • • • • • • • • • •	. 27		7		8		I
1898		• • • • • • • • • • • • • • • •	. 20		3		4		0
1899	• •	•••••	. 44	• • • • • • • •	6		13		2
1900		•••••	. 19		2		2		0
1901		• • • • • • • • • • • • • • • • • • • •	. 62		15		15		2
1902		•••••	. 30		6		6	• • • • • • •	I
1903			. 23		2	• • • • • • • • • • • • • • • • • • • •	2		0
1904		• • • • • • • • • • • • • • • • • • • •	. 36		2		3		0
1905	9 9	•••••	. 31	• • • • • • • •	5		ΙΙ		0

If we divide the period of time covered by this Table into two equal periods of eight years each, it is satisfactory to note that while the case mortality of the first period, from the year 1890 to 1897, works out at 26.21 per cent., the case mortality of the second and later period works out at 15.47 per cent., which is almost half the previous mortality. This result is probably due to some extent to a lessened virulence of the disease, brought about by improved methods of general sanitation, but is also partly due undoubtedly to improved methods of treatment which have been adopted during recent years.

ENTERIC OR TYPHOID FEVER.

The number of cases of this disease notified was again, as during the previous year, 10. This figure is much below the average for the previous ten years, which was 29. Two of the ten cases were unfortunately fatal.

The marked reduction in the number of cases notified of this disease I am inclined to attribute to the policy adopted, and partly carried out, at the end of the year 1901, and more completely carried out during 1903 and 1904, of closing practically all the manhole sewer grids and substituting in their place patent ventilating lamps. The reduction in the number of these cases is shown by the following Table, giving the number of cases and deaths for the last ten years:—

NOTIFICATIONS AND DEATHS FROM TYPHOID FEVER DURING THE LAST TEN YEARS.

	N	otification	ıs.	Deaths.
1896		18		4
1897		31		3
1898		56	• • • • • • • •	6
1899		44	• • • • • • • • •	10
1900		38	• • • • • • • • • • • • • • • • • • • •	8
1901		33	• • • • • • • •	9
1902		31		4
1903		21	• • • • • • • • •	7
1904		10	• • • • • • • •	0
1905		10		2

From the following Table, which gives the particulars of each case of Typhoid Fever which occurred in the Borough during the year 1905, it will be seen that in at least eight out of the ten cases there was more or less strong evidence that the disease was not contracted in the Borough, but was brought into the Borough from outside. This makes the reduction in the numbers all the more striking and satisfactory.

CASES OF TYPHOID FEVER NOTIFIED IN THE BOROUGH OF SOUTHPORT DURING THE YEAR 1905.

No. of Case	Date of Notification.	Initials of Patient.	Sex.	Age.	Residence.	Occupation.	Remarks and Result.
I	May 19th, 1905	E.H.	M	29	Cambridge Road	Photographer -	Mild Case. Recovered.
2	June 30th, "	E.G.	F	60	Albert Road	None	Had been staying at Harrogate to within 3 weeks of her death.
3	Aug. 7th ,,	G.T.	M	36	Old Park Lane	Marine Fireman	Taken ill at sea and brought home to Southport. Recovered.
4	,, 15th ,,	н.в.	M	27	Scarisbrick New Road	Not ascertained	Came as a visitor ill to Southport. Recovered.
5	,, 21st ,,	J.D.	М	22	Swire Road, Birkdale	Not ascertained	Admitted into Southport Infirmary from Birkdale. Recovered.
6	,, 22nd ,,	W.D.	M	14	Queen's Road	School	Came from near Newcastle- on-Tyne on August 11th. Recovered.
7	,, 26th ,,	D.G.	F	8	Linaker Street	Ditto	Returned from visit to Blackburn on Aug. 10th. Recovered.
8	,, 26th ,,	H.G.	F	29	Manchester Road	Dom e stic Servant	Returned on Aug. 12th from visit to brother at Leek, who was ill and died from Typhoid Fever. Felt ill since Aug. 17th. Recovered.
9	Oct. 2nd ,,	T.S.	M	28	Tithebarn Road	Railway Clerk	Recovered.
10	,, 4th ,,	S.W.	M	7	Hoghton Street	School	Supposed by parents to have contracted disease in Dublin.

ERYSIPELAS.

There were 22 cases of this disease notified, but fortunately without any deaths.

CHICKEN POX, MEASLES, AND WHOOPING COUGH.

These diseases are compulsorily notifiable in the Borough of Southport, and have been so since 1902. Chicken Pox is made notifiable not on account of its own importance or danger to the community, but as a safeguard against the possibility of mild cases of Smallpox being overlooked as Chicken Pox, the two diseases at times being in appearance very much alike.

The number of cases of both Chicken Pox and Whooping Cough were considerably less in 1905 than during the previous two years, there being of the former disease 99 cases with no deaths, and of the latter 70 cases with one death, as against 217 cases and no deaths and 233 cases and one death respectively in the previous year. There was, however, an increase in the number of cases of Measles over the number for the previous year, the figures being 627 as against 504. The deaths, however, from Measles in 1905 were six, as against nine in 1904.

In view of the fact that Measles and Whooping Cough are diseases which many parents are still apt to consider as of little importance, it is well to point out that although the rate of mortality of these diseases is somewhat less than that of Scarlet Fever, yet on account of the large number of children affected, the actual number of deaths from each of these diseases is considerably greater than from Scarlet Fever, as is made evident by the fact, as shown in Table VI. at the end of this Report, that while during the last five years Scarlet Fever caused 30 deaths, Measles caused 35 deaths and Whooping Cough 40 deaths.

CANCER, MALIGNANT DISEASE.

The number of deaths from Cancer which occurred in the Borough during 1905 was, after correction for deaths in Public Institutions, 56, which is exactly the same figure as for the previous year. The number of deaths for the last five years respectively has been as follows:—62, 46, 52, 56, 56.

The death-rate varies considerably for different parts of the Borough, Park Ward having the highest Cancer death-rate of 1.39 per 1,000, and the Central Wards a rate of 1.17 per 1,000, while the combined Scarisbrick and Sussex Wards have a rate of .85 per 1,000 and Hesketh Ward .84 per 1,000. This difference is in accord with the usual experience of Cancer and other forms of malignant disease, viz., that it is more prevalent among the more leisured and elderly people than it is among the active and younger populations.

SLAUGHTER HOUSES AND MEAT INSPECTION.

As in previous years, the five Private Slaughter Houses, and the Public Slaughter House at Blowick, were regularly visited during the year, and a careful supervision of them maintained. The Market Hall, Private Shops, Pig-dealers' premises, and Ice-cream Vendors' premises were also regularly visited.

During the year the following articles of food were seized and destroyed:—Seven carcases of beasts affected with Tuberculosis, one calf unfit for food, and twelve pieces of salted pork in a decomposing condition. Twenty geese which had become putrid, and three boxes of stale fish, were also destroyed at the Destructor.

DAIRIES, COWSHEDS, AND MILKSHOPS.

The above premises have been regularly visited during the year, and their condition and that of milk-supplying cows, both within the Borough, and also, by virtue of powers obtained in the Southport Corporation Act of 1900, as far as possible, outside the Borough, kept under careful observation.

During the year 54 samples of milk have been chemically analysed. In three cases the milk was found to be of poor quality, and the vendors were warned. In two cases there was a deficiency of milk fat and evidence of added water, and the vendors were fined.

Five samples of milk were examined bacteriologically by Professor Boyce at the Liverpool University Laboratories. Four of them were certified as being not tuberculous, while one sample was tuberculous. In the latter case the cow was traced and destroyed.

In two County cowsheds, at our instigation, improvements were effected in lighting, ventilation, air space, and drainage.

HOUSING OF THE WORKING CLASSES.

During the year it was only found necessary to deal with one house, in High Park Road, under the Housing of the Working Classes Act, 1890. Notice was served on the owner to put the place in thorough repair, and this being complied with, no further steps were considered necessary.

REFUSE REMOVAL.

The removal of ashpit refuse has not been quite so frequent during the last year as in previous years, though efforts are now being made to improve matters in this respect!

The question of enlarging the Refuse Destructor is engaging the attention of the Committee, on account of the growth of the town and the increased amount of refuse to be dealt with.

The flushing of private drains has been carried out as in previous years, and by this means the drains and grids of every house in the Borough have been flushed at least every two months.

TESTING OF DRAINS OF PRIVATE HOUSES.

As in previous years, a considerable number of examinations of the drains of private houses were made at the request and at the cost of ingoing or prospective tenants. As these examinations are carried out at a nominal charge, usually of from five to ten shillings, and certificates are given where everything is found or made satisfactory, the public are becoming more and more alive to the great advantage of thus, from time to time, assuring themselves as to the sanitary condition of the premises they occupy, or are about to occupy.

PUBLIC WATER SUPPLY.

The town's water is supplied by the Southport, Birkdale, and West Lancashire Water Board, and is obtained from deep wells near Ormskirk. Though somewhat hard from the presence of lime (which, however, is partly removed on boiling), it is, as the analysis by Professor Thresh, of London, shows, of exceptional purity. Professor Thresh's analysis will be found at the end of this Report.

SEWER VENTILATION.

The policy of ventilating our sewers by means of Webb's Ventilating Lamps, and closing as far as practicable all surface manhole grids, has been maintained, and has proved highly satisfactory. For some years now we have hardly had a complaint of sewer smells, and coincidently with the adoption of this policy there has been, as has been already mentioned under the heading of Typhoid Fever, a very marked decrease in the number of cases of that disease notified in the Borough.

SEWAGE WORKS AT CROSSENS.

The new Sewage Works which are being carried out at Crossens, at a cost when completed, and including the cost of land, of about £35,000, are intended to deal with the whole of the sewage of Southport, and will consist of six large sedimentation tanks and fifteen continuously acting bacterial filters, with other complementary parts. By these means an effluent will be discharged into the Crossens Channel which, judging from the results obtained by similar processes of treatment adopted at York and other places, should be absolutely without offence to anyone in the neighbourhood, and of great benefit to the Borough of Southport by maintaining an uninterrupted flow of its sewage towards the outlet at all states of weather or tide.

GENERAL SANITARY WORK.

The following Table shows the nature and amount of work done during the year by the Highway Department under orders sent to it by the Health Department, and also the corresponding figures for the two preceding years:—

	1903.		1904.		1905.
Houses re-drained	43		77		25
House drains unstopped	636		608	• • • • •	526
Midden privies converted into W.C.'s	42	* * * * * *	14		2
Wet ashpits converted into dry	24		14	• • • • •	2
Sundry structural nuisances abated	729		994		879
Drains smoke tested	369		284	• • • • •	228
Totals	1843		1991		1662

The following Table shows roughly the amount and nature of the work done by the Inspectors of Nuisances:—

Nuisances	reported to Health Committee	1340		1536	• • • • •	1268
	Inspections not reported to Health					
Com	mittee	14818		15139		13999
Visits to	Workshops (and reports)	376		392		407
,,	Bakehouses (and reports)	264		104	• • • • •	128
,,	Laundries	4		0	• • • • •	5
,,	Dairies, Cowsheds, and Milkshops	364		165	• • • • •	150
,,	Common Lodging Houses	1676	• • • • • •	497		393

	1903.		1904.		1905.
Visits under Shop Hours Act	III		50		644
Visits in connection with offensive trades	4		4		8:
Notices served	1208	• • • • •	1462		1128
Houses without proper Water Supply reported	4		5		1
Smoke Prevention observations	3		7		4
Houses disinfected	219		377	• • • • •	295,
Enquiries into notifications of Infectious Diseases	1544		1260		1124
Removal of cases to Hospital	147		269		193.
Samples of Sewage taken	6	• • • • •	0	• • • • •	15.
Houses examined and reported as unfit for					
habitation	1		6		2-
Visits to Ice Cream Vendors	39		30		33
,, Piggeries	120		160		
Inspection of House Drains	531		377	* * * * * *	238
Sanitary Certificates issued	11		20		13,

SAMPLES OF FOOD, ETC., TAKEN FOR ANALYSIS.

Under the provisions of the "Sale of Food and Drugs Acts," the following samples were taken:—

	No. of oles tak	en.	Result.
Milk	54		In three of the cases the milk was found of poor quality, and the vendors were warned. Two samples were found with deficiency of milk fat and added water, and the vendors were fined 1/- and costs, and 5/- and costs respectively.
Butter	47		One sample taken in course of delivery was found to consist of margarine. A fine of £5 and £2 costs was inflicted.
Lard	II		Genuine.
Coffee	9		,,
Vinegar	I		,,
Pepper (Cayenne, White,			
and Black)	5		"
Jam	1		"
Whisky	I		"
Rum	1		"
Brandy	4		"
Cheese	2	• • • • • • • •	"
Tea	5		"
Curry Powder	2		"
Ground Rice	2		"
Horner's Cream	I		"
Sugar	I		,,
	I		"
Olive Oil	I	• • • • • • • •	"
Green Peas	I 2		,,
Apples (fresh)			,,
rippies (itesti)	I	• • • • • • • •	"

MIDWIVES ACT OF 1902.

The administration of this Act was handed over by the County Council to the Southport Corporation in October, 1905. The Act provides for the compulsory enrolment of all midwives practising in England or Wales, and the appointment of supervising authorities over midwives in every County and County Borough. The duties of the supervising authorities include the general supervision of all midwives practising within their area, the investigation of charges of malpractice, negligence or misconduct on the part of any midwife, and the suspension of any midwife if such suspension appears necessary to prevent the spread of infection.

Regulations also are drawn up for the practice of midwives as regards cleanliness, disinfection, and stating the duties of the midwife to patient and child, etc.

The number of midwives enrolled in Southport at the end of 1905 was 15.

At the end of this Report will be found Five Tables of Statistics, made out in the form required by the Local Government Board, Two Tables dealing with Infectious Diseases, a Table of the Vital Statistics of Southport for the last 35 years, and a Report on the Administration of the Factory and Workshop Act, 1901, in Southport.

I am, Gentlemen,

Yours obediently,

JOHN J. WEAVER, M.R.C.S., L.S.A., D.P.H. Camb.,

Medical Officer of Health.

Town Hall, Southport.

Public Health Laboratories,

London Hospital Medical College,

London, E. and Chelmsford,

September 11th, 1905.

REPORT ON A SAMPLE OF WATER FROM THE SOUTHPORT MAINS.

The analyses appended are (1) the ordinary sanitary analysis, and (2) the determination of the saline constituents.

The former shows that the water maintains its exceptional organic purity; it is free from the slightest trace of polluting matter, and no purer water could possibly be obtained. The hardness remains practically the same as when previously examined.

The saline constituents have not varied to any appreciable extent, and there is no salt present which in the least degree is of an objectionable character.

This constancy in composition, and its extraordinary organic purity, renders the water admirably adapted for all the purposes of a public supply to such an important health resort as Southport.

DATA RESPECTING A SAMPLE OF WATER FROM THE BOROUGH OF SOUTHPORT.

Received September 5th, 1905.

Labelled: "Sample of Town's Water drawn from a tap connecting direct with "main at 134, Sefton Street, Southport. Date taken, September 4th, 1905."

Particulars of Source: Deep Wells in New Red Sandstone.

PHYSICAL EXAMINATION.

Turbidity: Quite clear and bright. No deposit.

Colour: Blue tint. Odour: None.

CHEMICAL EXAMINATION.

		Results in	
Determinations.	Grains per gallon.	Parts	per 100,000.
Total Solid Matter dried at 180° C	24.3	• • • • • • •	34.7
Chlorine	2.0		2.8
Equivalent to Chlorides (60 % Cl.)			4.7
Nitric Nitrogen	0.026		0.037
Equivalent to Nitrates (17 % N.)			0.22
Nitrites		Absent.	
Hardness: Permanent, 6°; Temporary, 13.5°;			
Lead, Copper, Zinc, Iron		Absent.	
Free Ammonia	o.ooo3		0.0004
Organic Ammonia	0.0000		0.0000
Oxygen absorbed at 98° F. in three hours			0.0240

ESTIMATION OF THE SALINE CONSTITUENTS.

The results obtained corresponded to the parts as under:—

	Per 100 000.		er 70,000 or ns per gallon.
Calcium Carbonate	17.5		12.25
Magnesium Carbonate	7.0		4.90
Magnesium Sulphate	2.25		1.57
Sodium Sulphate	2.75		1.93
Sodium Chloride	•		3.22
Sodium and Potassium Nitrate	.25		.18
Silica, etc.	•3		.25
Total Solids dried at 180° C	34.7	* * * • • • • •	24.30

JOHN C. THRESH.

Factory and Workshops Acts.

The following Report is made out in accordance with the requirements of the Home Office, to whom a copy of this Report has to be sent.

FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES, AND HOMEWORK.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OF NUISANCES.

Premises.		Number of	
Tremises.	Inspections.	Written Notices.	Prosecutions.
Factories	14	None.	None.
Workshops (Including Workshop Laundries.)	330	35	None.
Workplaces	I 2	None.	None.
Homeworkers' Premises	14	None.	None.
Total	370	35	None.

2.-DEFECTS FOUND.

	Nu	mber of Def	ects.	NT
Particulars.	Found.	Remedied.	Referred to H.M. Inspector.	tions.
NT :				
Nuisances under the Public Health Acts—* Want of Cleanliness	51	5.1	None.	None.
Want of Cleaningss	54 2	54	,,	* ,,
Overcrowding	None.	None.	,,	,,,
Want of Drainage of Floors	,,	,,	,,	,,
Other Nuisances.	9	9	,,	,,
(insufficient	$\frac{3}{2}$	2	,,	,,
unsuitable or				
Sanitary Accommodations defective	12	12	,,	,,
not separate				
for sexes	I	None.	,,	, ,,
Offences under the Factory and Workshop Act—				
Illegal occupation of Underground		7		
Bakehouse (S. 101)	None.	None.	None.	,,
Breach of special Sanitary Requirements				
for Bakehouses (SS. 97 to 100)	,,	"	,,	,,
Failure as regards Lists of Outwork'rs (S.107)	,,	,,	,,	,,
Giving Out Work to (unwholesome		Ò		
be done in premises (S. 108)	, ,,	,,	"	,,,
which are infected (S. 110)	,,	"	,,	,,
Allowing Wearing Apparel to be Made				
in Premises Infected by Scarlet Fever				
or Smallpox (S. 109)	"	, ,,	, ,,	9 9
Other Offences	"	"	,,	,,
Total	80	79	,,	,,

^{*}Including those specified in sections 2, 3, 7 and 8, of the Factory Act as remediable under the Public Health Acts.

Section 22 of the Public Health Acts Amendment Act, 1890, has been adopted in Southport. The question of sufficiency and suitability of sanitary accommodation for persons employed in factories and workshops is decided in each case on its merits.

	Class.	Nur	mber.
Matters notified to H.M.	Inspectors of Factories—		18
Failure to affix Abstract of Workshop Act (S. 13	of the Factory and 3)		7
mediable under the l	as re- Inspectors Public Reports (of action	No	one.
Health Acts, but not the Factory Act (S. 5	under taken) sent to H.M. Inspectors		,,
Other			> 3
Underground Bakehouses	(S. 101)—		
Certificates granted d	uring the year		I
In use at the end of the	ne year	I	2
		Num	ber of
Homework—		Lists.	Outworkers.
Lists of Outworkers* (S. 10)	7)——		
Lists received	••••••	14	9
Addresses of Outworkers-	forwarded to other Authorities	3	I
	received from other Authorities	None.	
Homework in unwholesome or	infected premises—	Wearing Apparel;	Other.
Notices prohibiting Home premises (S. 108)	work in unwholesome	None.	None.
	se notified in Homeworkers'	,,	,,
Orders prohibiting Homes (S. 110)	work in Infected premises	**	,,
Workshops on Register (S	S. 131) at the end of the year	49	6
Total number of	Workshops on Register	49	6
F ebruary 12th. 1906.	10.	HN I. WEA	VER.

February 12th, 1906.

JOHN J. WEAVER,

Medical Officer of Health.

^{*}The Lists are received twice in each year. The year's figures in the Table are those obtained by adding together the two half-yearly totals.

Vital Statistics.—Borough of Southport. (Thirty-five Years.) TABLE VIII.

Note.—The figures given in this Table, except in columns distinguished as "native" or "local," are gross figures, without correction, and on that account may in some cases be found to differ from the figures given in Tables I. to IV., which are corrected in accordance with the requirements of the Local Government Board, as stated in the notes appended to them.

	1	BI	RTHS.	1	DEA	ATHS.		1]						DEATH								1 1	Deaths			OF P	ERSON	IS AG	ED,	ANNI	UAL R	ATES F	PER TH				D. 1-4:
18	Year.			Male.	Female	. morethar	n less than	Lives Imported	Zymotic	Pox.	Measle s .	Scarlet Fever.	Diph- theria.	Whoop-			Cholera and Choleraic	of the Respira- tory	Phthisis.	Violence.	Imported Phthisis.	Diseases of the Respira- tory	Deaths (in Public Institu-	under One Year of Age to 1000		15.	515.	1525.	25—60.	60 and upwards.	Births.	Deaths, Gross.	Deaths, Local.	Deaths, Zymotic.	Deaths, Native	of Respiratory Organs.	of Respiratory Organs,	(Estimated to
State Stat	1871	264	242	221	203				65	24	3	5	2	6	15	10	I		59	ΙΙ		_	38	170	86	47	20	37	140	94	27.97	23.44	—	3.59		3.09		
14 15 15 15 15 15 15 15		,	· ·			343	100	7.3	40	6	ı	2	I	8				59	72	8	21	7	27	170	94	56	23	25	152	93	29.34	23.50	19.63	2.12	2.70	3.13	2.76	18,846
3.7. 3.7. 3.7. 3.7. 3.7. 3.7. 3.7. 3.7.						353	106		78		I	32		3	22	20			68	9	33	8	32	164	95	50	39	24	139	112	29.43	23.37	20.06	3.97	1.78	2.95	2.64	19,638
1.50	1		Ü	1			118		81	1-1	15	27	_	3	. 22	14		64	66	15	34	II	28	178	III	67	32	2 I	181	93	30.39	24.67	20.52	3.95	1.56	3.13	2.59	20,463
15					287	, i	118		70	I		7	I	6	39	16		90	87	12	27	13	31	183	123	55	27	43	193	152	28.81	25.65	22.14	3.02	2.59	3.89	3.33	23,113
1967 1968 1969				326	305	485	146	102	85	27	I		5	1		18	-	93	83	14	34	23	44	153	132	44	28	51	215	161	33.19	24.27	20.34	3.27	1.88	3.57	2.69	25,997
1879				291	329	503	117	106	53	I	I	2	17	× 5	13	14	_	104	75	17	25	20	22	123	113	67	39	34	202	165	33.87	22.85	18.94	1.95*	1.84	3.83		2
1886 189 25 340 35 110 37 110 37 11 4 4 8 12 7 13 111 70 13 12 10 10 10 10 10 10 10	1878	481	444	332	314	518	128	III	70		4	14	7		14	31		94	87	16	32	14	20	151	140	70	29	37	200	170	32.66	22.81	18.89	2.47	1.94	3.32	2.82	28,317
1881 137 460 290 278 462 100 97 46 210 278 462 100 97 46 27 30 173 170 28.48 17.64 14.82 130 130 292 28.5 37.191 1882 137 460 290 278 462 100 97 46 27 30 173 170 28.48 17.64 14.82 130 130 292 28.5 37.191 1883 138 11 136 389 420 102 01 34 — 15 7 4 6 6 8 — 11 6 7 10 17 7 17 17 7 29 13.4 14.8 28 130 36 192 27 160 13.5 16.1 15.5 15.1 15.5 15.1 15.5 15.1 15.5 15.1 15.5 15.1 15.1 15.5 15.1 15.5 15.1 15.1 15.5 15.1 15.1 15.5 15.1 15.1 15.5 15.1 15.1 15.5 15.1 15.1 15.5 15.1 15.1 15.5 15.1 15.1 15.5 15.1 15.1 15.5 15.1	1879	461	465	289	328	511	106	89	25	I	I	5	2	7	2	8		134	68	16	19	17	29	124	115	63	26	36	213	164	31.33	20.87	17.86	.84	1.65	4.53		
1882 431 421 263 389 450 102 91 34	1880	470	452	340	367	610	97	81	49		4	4	3	18	7	13	_	119	70	13	22	10	26	190	176	86	33	32	200	180	29.89	22.92	20.29	1.58	1.55	3.85	3.53	30,845
1883 438 411 423 335 358 100 93 31	1881	457	460	290	278	462	106	90	44	II— ,	5	ΙI	6	5	10	7	I	94	73	13	28	12	24	100	92	7 6	27	30	173	170	28.48	17.64	14.84	1.36	1.39	2.92	2.55	32,197
1884	1882	451	1 421	263	289	450	102	.91	34	\		15	7	4	6	2	_	108	72.	8	24	17	24	119	104	73	39	27	166	143	26.24	16.61	13.87	1.02	1.44	3.25	2.74	33,232
1885 453 149 37 37 517 171 93 37 4 3 8 12 5 5 108 65 20 19 15 28 114 129 20 28 31 156 26 2515 1742 1510 103 1.28 3.01 2.69 35.833 1886 599 415 324 316 344 96 82 21 21 3 5 5 1 6 6 100 77 24 18 5 29 140 129 20 28 31 156 26 2515 1742 1510 103 1.28 3.01 2.69 35.833 1886 599 413 313 316 362 575 103 85 36 6 10 6 7 4 5 105 67 100 17 8 33 151 125 59 30 40 100 234 21.92 1799 1737 2.69 2.59 38.640 1889 457 431 319 387 599 116 96 55 4 4 48 18 1 8 113 6 113 6 13 22 125 6 43 31 2.59 13.44 17.52 15.79 1.31 2.59 38.640 1889 427 431 319 386 584 121 95 41 4 4 3 14 5 2 3 4 4 4 5 4 4 4 5 4 4	1883	438	3 411	423	335	558	100	93	51		8	7	4	18	6	8	1 - 1	144	72	10	17	7	29	134	114	85	30	38	195	196	24.97	19.35	16.61	1.50	1.61	4.23	4.03	34,077
1886 399 415 324 316 544 96 82 21 — 1 3 5 5 1 6 — 100 77 24 18 5 29 140 129 40 28 31 186 226 2515 17.42 15.19 .57 1.61 270 275 36.745 1887 413 173 316 362 573 103 88; 36 — 10 6 7 4 4 5 — 105 67 20 17 8 33 151 125 59 30 40 190 234 21.02 17.99 1573 40 133 173 189 387 590 116 96 53 — 4 4 78 88 1 8 — 113 64 13 23 5 30 146 131 72 15 12 180 240 22.41 17.52 15.19 1.05 1.27 2.80 4.39 1890 428 431 319 386 384 121 95 41 — 4 13 14 5 2 3 — 17 65 17 49 7 41 122 105 63 11 28 22 24 24 21.41 17.35 15.10 1.03 13.3 2.95 40.04 189 475 22 369 412 65 63 66 122 10 3 35 172 34 — 1 7 3 .9 5 9 — 160 68 18 19 18 35 124 124 16 138 35 24 199 24.99 18.05 31 27 10 10 10 10 10 10 10 10 10 10 10 10 10	1884	460	416	315	302	511	106	87	36		3	3	10	3	5	ΙΙ	I	103	78	16	20	II	25	132	116	70	25	37	164	205	25.07	17.66	15.17	1.03	1.66	2.95	2.63	1
1887 13 16 36 375 103 85 375 103 85 36 10 6 7 4 4 5 105 67 20 17 8 33 151 125 59 30 10 190 231 219 217 9 15.73 90 1.33 2.79 24.57 37.081 1889 467 481 319 387 390 116 96 53 4 4 8 18 8 113 64 13 23 5 30 148 131 77 15 15 15 10 14 13 139 386 581 12 14 14 15 15 14 15 15 15	1885	453	419	317	317	517	117	93	37	-	4	3	8	12	5	5		108	65	20	19	15	28	141	123	71	24	27	193	196	24.34	17.72	15.10	1.03	1.28	3.01	2.60	
1888 407 400 331 370 387 714 91 25 — 2 18 — 3 2 — 108 72 16 23 8 27 135 125 60 45 37 222 212 23.99 18.14 15.79 .65 1.27 2.80 2.59 38.649 1889 457 431 319 386 384 121 95 41 — 4 13 14 5 2 3 — 127 65 1.4 19 7 41 122 105 63 41 28 225 243 21.14 17.35 15.01 1.01 1.13 2.95 40.631 1892 488 439 403 405 408 407 408 408 408 408 408 408 408 408 408 408	1886	509	9 415	324	316	544	96	82	21		1	3	5	5	I	6.		100	77	24	18	5	29	140	129	40	28	31	186	226	25.15	17.42	15.19	.57	1.61	2.72	2.59	
1889 457 431 319 387 590 116 96 53 — 4 4 18 88 1 8 — 113 64 13 23 5 30 148 131 72 45 32 180 246 22.41 17.82 15.39 1.34 1.03 2.85 2.73 39.623 1890 428 431 319 386 584 121 95 41 — 4 13 14 5 2 3 3 — 127 05 14 19 7 11 122 105 63 41 28 225 243 21.14 17.35 15.01 1.01 1.13 3.13 2.95 40.631 1891 475 522 369 422 656 1.35 112 34 — 1 7 3 .9 5 9 — 160 68 18 19 18 35 124 12 4 61 38 35 124 12 34 27 246 316 21.07 19.22 16.83 1.12 1.2 4 9 — 3 7 6 3 14 14 2 122 71 22 17 11 43 146 145 68 24 40 231 230 23.19 17.30 14.92 15.83 1.25 1.30 3.27 2.91 42.187 1893 494 499 366 322 617 121 102 49 — 3 7 6 3 14 14 2 122 71 22 17 11 43 146 145 68 24 40 231 230 23.19 17.30 14.92 11.14 1.26 2.84 2.59 43.1894 595 461 353 332 577 108 88 5 1 — 1 8 12 23 5 1 1 91 58 16 11 3 44 143 139 64 35 27 205 215 2223 18.51 15.0 16.2 195 20.02 43.469 1895 3.35 497 370 429 693 104 84 42 — 1 6 3 1 9 22 — 138 61 24 19 11 49 137 142 55 27 36 229 310 2.38 18.15 10 16.25 195 3.13 2.88 44.124 1896 595 410 350 350 350 572 111 89 45 — 6 13 5 8 2 10 2 95 54 17 10 9 47 129 134 60 22 31 195 241 23.13 13.54 1.66 1.00 98 2.13 2.88 44.124 1896 599 470 350 350 659 111 95 40 — 7 1 3 7 8 19 — 116 70 17 12 14 81 17 19 9 50 181 182 70 24 38 231 257 2.006 17.70 15.48 1.18 1.30 2.51 2.31 43.404 190 36 349 360 370 659 111 95 40 — 7 1 3 7 8 19 — 116 70 17 12 14 81 19 11 10 10 10 10 10 10 10 10 10 10 10 10	1887	413	3 413	316	362	575	103	85	36	,	10	6	7	4	4	5		105	67	20	17	8	33	151	125	59	30	40	190	234	21.92	17.99	15.73	.96	1.33	2.79	2.57	
1890 428 431 319 386 584 121 93 41 — 4 13 14 5 2 3 — 127 65 14 19 7 41 122 105 63 11 28 225 243 21.14 17.55 15.01 1.01 1.13 3.13 2.95 40.631 1891 475 522 369 422 656 135 112 34 — 1 7 3 . 9 5 9 — 160 68 18 19 18 35 124 124 61 38 35 23.49 29 23.99 19.03 16.34 82 1.18 3.85 3.41 41.561 1892 488 439 403 405 686 122 101 53 — 14 17 7 7 4 4 — 1.38 69 19 14 15 35 125 116 69 34 27 246 316 21.97 19.22 16.83 1.25 1.50 3.27 2.91 42.187 1893 494 499 366 372 617 121 102 49 — 3 7 6 3 14 14 2 122 71 22 17 11 43 146 145 68 24 40 231 230 23.19 17.30 14.92 11.14 12.6 2.84 2.59 42.853 1893 505 461 353 332 577 108 88 51 — 1 8 12 23 5 1 1 91 38 16 14 3 44 11.3 139 64 35 27 205 215 22.22 15.85 13.82 1.17 1.01 2.09 2.02 43.469 1895 535 497 370 429 695 104 84 42 — 1 6 3 1 9 22 — 138 61 24 19 11 49 137 142 55 27 36 229 310 23.38 18.15 16.25 .95 .95 3.13 2.88 44.124 1896 545 491 330 553 572 111 89 45 — 6 13 5 8 2 100 1 95 54 17 10 9 47 129 134 60 22 31 195 247 23.03 15.40 13.64 1.00 98 2.12 1.92 44.789 1895 507 496 381 421 669 133 101 54 — 4 5 5 14 2 22 2 114 81 17 19 9 50 181 182 70 24 38 231 257 22.00 17.70 15.48 118 1.36 2.51 2.31 45.464 190 501 468 364 424 686 102 71 32 — 2 4 2 5 8 8 11 — 143 77 15 15 10 32 144 15 15 16 23 35 12.21 1.74 13.65 .86 71 13.05 30 1.22 1.35 14.54 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25	1888	467	7 460	331	370	587	114	91	25	1-	_	2	18		3	2		108	72	16	23	8	27	135	125	60	45	37	222	212	23.99	18.14	15.79	.65	1.27	2.80	2.59	38,640
1891 475 522 369 422 636 133 112 34 — 1 7 3 9 5 9 — 160 68 18 19 18 35 124 124 61 38 35 234 299 23.99 19.03 10.34 .82 1.18 3.85 3.41 41.561 1892 488 439 403 405 686 122 101 53 — 14 17 7 7 4 4 1 — 138 69 19 14 15 35 125 116 69 34 27 246 316 21.97 19.22 16.83 1.25 1.36 3.27 2.91 42.187 1893 494 499 366 372 617 121 102 49 — 3 7 6 3 14 14 2 122 71 22 71 22 71 12 43 146 145 68 24 40 231 250 251 19.50 14.95 1.36 1.26 2.84 2.59 42.823 1894 305 313 332 577 108 88 51 — 1 8 12 23 5 1 1 19 158 16 14 3 44 143 139 64 35 27 205 215 22.22 15.85 13.82 1.17 1.01 2.09 2.02 43.469 1895 535 497 370 429 695 104 84 42 — 1 6 3 1 9 22 — 138 61 24 19 11 49 137 142 55 27 36 229 310 23.38 18.15 16.25 .95 19 3.13 2.88 44.124 1896 545 491 330 353 572 111 89 45 — 6 13 5 8 2 10 1 95 54 17 10 9 47 129 134 60 22 31 195 241 25.13 15.40 13.64 1.00 98 2.12 1.92 44.789 1897 367 496 381 421 669 133 101 54 — 4 5 5 14 2 22 2 11.4 81 17 19 9 50 181 182 70 24 3 88 231 257 22.00 17.70 15.48 1.18 1.36 2.51 2.31 45.40 189.469 189 189 510 381 433 673 141 112 57 — 4 6 6 15 10 16 — 142 68 24 18 19 71 165 107 37 24 48 231 289 21.54 17.46 15.03 1.21 1.07 3.03 2.62 45.844 199 199 510 384 433 673 141 112 57 — 4 6 6 15 10 16 — 142 68 24 18 19 71 165 107 37 24 48 231 289 21.54 17.46 15.03 1.21 1.07 3.03 2.62 45.844 199 190 478 489 380 380 380 380 380 380 380 380 380 380	1889	457	7 431	319	387	590	116	9 6	53	_	4	4	18	18	I	8	-	113	64	13	23	5	30	148	131	72	45	32	180	246	22.41	17.82	15.39	1.34	1.03	2.85	2.73	39,623
1892 488 439 403 405 686 122 101 53 — 14 17 7 7 4 4 — 138 69 19 14 15 35 125 116 69 34 27 246 316 21.97 19.22 16.83 1.25 1.30 3.27 2.91 42.187 1893 494 499 366 372 617 121 102 49 — 3 7 6 3 14 14 2 122 71 22 17 11 43 146 145 68 24 40 231 230 23.19 17.30 14.92 1.14 1.26 2.84 2.59 42.823 1894 505 461 353 332 577 108 88 51 — 1 8 12 23 5 5 1 1 1 91 58 16 14 3 44 143 139 64 35 27 205 215 22.22 15.85 13.82 1.17 1.01 2.09 2.02 43.469 1895 333 497 370 429 695 104 84 42 — 1 6 3 1 9 22 — 138 61 24 19 11 49 137 142 55 27 36 229 310 23.38 18.15 16.25 .95 .95 .313 2.88 244.789 1896 545 491 330 333 572 111 89 45 — 6 13 5 8 2 10 1 95 54 17 10 9 47 129 134 60 22 31 195 241 23.13 15.04 13.64 1.00 .98 2.12 1.92 44.789 1898 509 470 350 370 659 111 95 40 — 7 1 3 7 3 19 — 116 70 17 12 14 56 138 135 50 21 42 230 242 21.21 15.71 13.65 .86 1.26 2.51 2.21 46.149 1899 499 510 384 432 675 141 112 57 — 4 6 6 6 15 10 16 — 142 68 24 18 19 71 165 167 37 24 48 231 289 21.51 17.46 15.03 1.21 1.07 3.03 2.62 40.844 1900 501 468 564 122 66 66 102 71 32 — 2 4 2 5 8 11 — 143 77 15 15 10 52 144 14 0 43 23 35 25 20 38 16.57 15.45 14.65 17.00 3.04 2.79 47.850 1901 478 459 384 395 674 105 79 79 — 1 7 15 16 9 31 — 144 53 18 17 11 56 163 153 66 32 31 238 239 11.25 13.20 0.44 1.65 17.74 19.9 19.0 19.0 18.0 18.0 18.0 19.0 19.0 19.0 19.0 18.0 18.0 19.0 19.0 18.0 18.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19	1890	428	8 431	319	386	584	121	95	41		4	13	14	5	2	3		127	65	14	19	7	41	I 2 2	105	63	41	28	225	243	21.14	17.35	15.01	1.01	1.13	3.13	2.95	40,631
1893 494 499 366 372 617 121 102 49 — 3 7 6 3 14 14 2 122 71 22 17 11 43 146 145 68 24 40 231 230 23.19 17.30 14.92 1.14 1.26 2.84 2.59 42.823 1894 505 461 353 332 577 108 88 51 — 1 8 12 23 5 1 1 91 38 16 14 3 44 143 139 64 35 27 205 215 22.22 15.85 13.82 1.17 1.01 2.09 2.02 43.469 1895 535 497 370 429 695 104 84 42 — 1 6 3 1 9 22 — 138 61 24 19 11 49 137 142 55 27 36 229 310 23.38 18.15 16.25 .95 .95 .95 .91 2.88 44.124 1896 545 491 330 353 572 111 89 45 — 6 13 5 8 2 10 1 95 54 17 10 9 47 129 134 60 22 31 195 241 23.13 15.40 13.64 1.00 .98 2.12 1.92 44.789 1897 597 496 381 421 669 133 101 54 — 4 5 5 14 2 22 2 114 81 17 19 9 50 181 182 70 24 38 231 257 22.06 17.70 15.48 1.18 1.36 2.51 2.31 45.464 188 509 470 350 370 659 111 95 40 — 7 1 3 7 3 19 — 116 70 17 12 14 56 138 135 50 21 42 230 242 21.21 15.71 13.65 .86 1.26 2.51 2.31 45.464 190 501 468 364 422 686 102 71 32 — 2 4 2 5 8 11 — 143 77 15 15 10 52 144 140 45 23 35 23 259 19.42 15.50 15.08 507 13.09 479 478 459 384 336 362 622 98 72 37 2 9 10 2 5 5 0 9 — 97 53 21 12 2 16 57 138 125 50 19 33 200 286 18.20 14.45 12.74 .97 .50 2.09 17.77 49.669 1904 478 404 338 362 622 98 72 37 2 9 10 2 5 5 0 9 — 97 53 21 12 13 43 130 115 50 18 27 210 300 17.51 14.29 12.86 .73 .81 1.99 1.00 17.71 14.90 17.70 17.71 18.50 18.70 17.7	1891	475	5 522	369	422	656	135	112	34	1-	I	7	3 .	y 9-	5	9		160	68	18	19	18	35	124	124	61	38	35	234	299	23.99	19.03	16.34	.82	1.18	3.85	3.41	41,561
1894 505 401 353 332 577 108 88 51 — 1 8 12 23 5 1 1 91 58 10 14 3 44 143 139 64 35 27 205 215 22.22 15.85 13.82 1.17 1.01 2.09 2.02 43,469 1895 535 497 370 429 695 104 84 42 — 1 6 3 1 9 22 — 138 61 24 19 11 49 137 142 55 27 36 229 310 23.38 18.15 10.25 .95 .95 3.13 2.88 44,124 1896 545 491 330 353 572 111 89 45 — 6 13 5 8 2 10 1 95 54 17 10 9 47 129 134 60 22 31 195 241 23.13 15.40 13.64 1.00 .98 2.12 1.92 44,789 1897 507 496 381 421 669 133 101 54 — 4 5 5 14 2 22 2 114 81 17 19 9 50 181 182 70 24 38 231 257 22.06 17.70 15.48 1.18 1.36 2.51 2.31 45,464 1898 509 470 350 370 659 111 95 40 — 7 1 3 7 3 19 — 116 70 17 12 14 56 138 135 50 21 42 230 242 21.21 15.71 13.05 .86 1.20 1.01 1.00 1.00 14.0	1892	488	8 439	403	405	686	122	101	53		14	17	7	7	4	4	_	138	69	19	14	15	35	125	116	69	34	27	246	316	21.97	19.22	16.83	1.25	1.30	3.27	2.91	42,187
1895 535 497 370 429 695 104 84 42 — 1 6 3 1 9 22 — 138 61 24 19 11 49 137 142 55 27 36 229 310 23.38 18.15 16.25 .95 .95 .95 .95 .3.13 2.88 44,124 1866 545 491 330 553 572 111 89 45 — 6 13 5 8 2 10 1 95 54 17 10 9 47 129 134 60 22 31 195 241 23.13 15.40 13.64 1.00 .98 2.12 1.92 44,789 1897 507 496 381 421 669 133 101 54 — 4 5 5 14 2 22 2 114 81 17 19 9 50 181 182 70 24 38 231 257 22.06 17.70 15.48 1.18 1.36 2.51 2.31 45,464 1898 509 470 350 370 659 111 95 40 — 7 1 3 7 3 19 — 116 70 17 12 14 56 138 135 50 21 42 230 242 21.21 15.71 13.65 .86 1.26 2.51 2.21 46,149 1899 510 384 432 675 141 112 57 — 4 6 6 15 10 16 — 142 68 24 18 19 71 165 167 57 24 48 231 289 21.54 17.46 15.03 1.21 1.07 3.03 2.62 46,844 190 501 468 364 424 686 102 71 32 — 2 4 2 5 8 11 — 143 77 15 15 10 52 144 140 45 23 35 230 315 20.38 16.57 15.08 .67 1.30 3.01 2.79 47,550 190 478 459 384 395 674 105 79 79 — 1 7 15 16 9 31 — 114 53 18 17 11 56 163 153 66 32 31 238 259 19.42 16.15 14.51 1.64 .75 2.36 2.13 48,250 190 478 458 331 387 607 111 85 48 1 12 7 2 13 7 6 — 104 36 22 12 16 57 138 125 55 19 33 200 286 18.20 14.45 12.74 .97 .50 2.09 1.77 49.669 1904 478 404 358 362 622 98 72 37 2 9 10 2 5 0 9 — 97 53 21 12 13 43 130 115 50 18 27 21 10 30 17.71 14.20 12.86 .73 .81 1.93 1.66 50,385	1893	49-	4 499	366	372	617	121	102	49		3	7	6	3	14	14	2	122	71	22	17	II	43	146	145	68	24	40	231	230	23.19	17.30	14.92	1.14	1.26	2.84	2.59	42,823
1896 545 491 330 353 572 111 89 45 — 6 13 5 8 2 10 1 95 54 17 10 9 47 129 134 60 22 31 195 241 23.13 15.40 13.64 1.00 .98 2.12 1.92 44,789 1897 507 496 381 421 669 133 101 54 — 4 5 5 14 2 22 2 114 81 17 19 9 50 181 182 70 24 38 231 257 22.06 17.70 15.48 1.18 1.36 2.51 2.31 45,464 1888 509 470 350 370 659 111 95 40 — 7 1 5 7 3 19 — 116 70 17 12 14 56 138 135 50 21 42 230 242 21.21 15.71 13.65 .86 1.26 2.51 2.21 46,149 1899 499 510 384 432 675 141 112 57 — 4 6 6 15 10 16 — 142 68 24 18 19 71 165 167 57 24 48 231 289 21.54 17.46 15.03 1.21 1.07 3.03 2.62 46,844 189 19 14 48 459 384 395 674 105 79 79 — 1 7 15 16 9 31 — 114 53 18 17 11 56 163 153 66 32 31 238 259 19.42 16.15 14.51 1.64 .75 2.36 2.13 48,250 1903 448 456 331 387 607 111 85 48 1 12 7 2 13 7 6 — 104 36 22 12 16 57 138 125 55 19 33 200 286 18.20 14.45 12.74 .97 .50 2.09 1.77 49.669 1904 478 404 358 362 622 98 72 37 2 9 10 2 5 0 9 — 97 53 21 12 13 43 130 115 50 18 27 210 300 17.51 14.29 12.86 .73 .81 1.99	1892	505	5 461	353	332	577	108	88	51	-	I	8	I 2	23	5	I	I	91	58	16	14	3	44	143	139	64	35	27	205	215	22.22	15.85	13.82	1.17	1.01	2.09		43,469
1897 507 496 381 421 669 133 101 54 — 4 5 5 14 2 22 2 114 81 17 19 9 50 181 182 70 24 38 231 257 22.06 17.70 15.48 1.18 1.36 2.51 2.31 45,464 1898 509 470 350 370 659 111 95 40 — 7 1 3 7 3 19 — 116 70 17 12 14 56 138 135 50 21 42 230 242 21.21 15.71 13.65 .86 1.26 2.51 2.21 46,149 1899 499 510 384 432 675 141 112 57 — 4 6 6 15 10 16 — 142 68 24 18 19 71 165 167 57 24 48 231 289 21.54 17.46 15.03 1.21 1.07 3.03 2.62 46,844 1900 501 468 364 424 686 102 71 32 — 2 4 2 5 8 11 — 143 77 15 15 10 52 144 140 45 23 35 230 315 20.38 16.57 15.08 .67 1.30 3.01 2.79 47,550 1901 478 459 384 395 674 105 79 79 — 1 7 15 16 9 31 — 114 53 18 17 11 56 163 153 66 32 31 238 259 19.42 16.15 14.51 1.64 .75 2.36 2.13 48,250 1902 479 463 346 397 621 122 103 31 — 7 3 6 5 4 6 — 123 40 18 12 20 63 142 134 59 32 22 201 295 19.42 15.32 13.20 .64 .58 2.53 2.12 48,500 1903 448 456 331 387 607 111 85 48 1 12 7 2 13 7 6 — 104 36 22 12 16 57 138 125 55 19 33 200 286 18.20 14.45 12.74 .97 .50 2.09 1.77 49.669 1904 478 404 358 362 622 98 72 37 2 9 10 2 1.5 0 9 — 97 53 21 12 13 43 130 115 50 18 27 210 30 17.51 14.29 12.86 .73 .81 1.99 1.66 50,385	1895	533	5 497	370	429	695	104	84	42		I	6	3	I	9	22		138	61	24	19	II	49	137	142	55	27	36	229	310	23.38	18.15	16.25	.95	.95	3.13	2.88	44,124
1898 509 470 350 370 659 111 95 40 — 7 1 3 7 3 19 — 116 70 17 12 14 56 138 135 50 21 42 230 242 21.21 15.71 13.65 .86 1.26 2.51 2.21 46,149 1899 499 510 384 432 675 141 112 57 — 4 6 6 6 15 10 16 — 142 68 24 18 19 71 165 167 57 24 48 231 289 21.54 17.46 15.03 1.21 1.07 3.03 2.62 46,844 1900 501 468 364 424 686 102 71 32 — 2 4 2 5 8 11 — 143 77 15 15 10 52 144 140 45 23 35 230 315 20.38 16.57 15.08 .67 1.30 3.01 2.79 47,550 1901 478 459 384 395 674 105 79 79 — 1 7 15 16 9 31 — 114 53 18 17 11 56 163 153 66 32 31 238 259 19.42 16.15 14.51 1.64 .75 2.36 2.13 48,250 1902 479 463 346 397 621 122 103 31 — 7 3 6 5 4 6 — 123 40 18 12 20 63 142 134 59 32 22 201 295 19.42 15.32 13.20 .64 .58 2.53 2.12 48,250 1903 448 456 331 387 607 111 85 48 1 12 7 2 13 7 6 — 104 36 22 12 16 57 138 125 55 19 33 200 286 18.20 14.45 12.74 .97 .50 2.09 1.77 49,669 1904 478 404 358 362 622 98 72 37 2 9 10 2 5 0 9 — 97 53 21 12 13 43 130 115 50 18 27 200 300 17.51 14.29 12.86 .73 .81 1.93 1.66 50,385	1896	543	5 491	330	353	572	III	89	45	_	6	13	5	8	2	10	I	95	54	17	10	9	47	129	134	60	22	31	195	241	23.13	15.40	13.64	1.00	.98	2.12	1.92	44,789
1899 499 510 384 432 675 141 112 57 — 4 6 6 15 10 16 — 142 68 24 18 19 71 165 167 57 24 48 231 289 21.54 17.46 15.03 1.21 1.07 3.03 2.62 46,844 1900 501 468 364 424 686 102 71 32 — 2 4 2 5 8 11 — 143 77 15 15 10 52 144 140 45 23 35 230 315 20.38 16.57 15.08 .67 1.30 3.01 2.79 47,550 1901 478 459 384 395 674 105 79 79 — 1 7 15 16 9 31 — 114 53 18 17 11 56 163 153 66 32 31 238 259 19.42 16.15 14.51 1.64 .75 2.36 2.13 48,250 1902 479 463 346 397 621 122 103 31 — 7 3 6 5 4 6 — 123 40 18 12 20 63 142 134 59 32 22 201 295 19.42 15.32 13.20 .64 .58 2.53 2.12 48,500 1903 448 456 331 387 607 111 85 48 1 12 7 2 13 7 6 — 104 36 22 12 16 57 138 125 55 19 33 200 286 18.20 14.45 12.74 .97 .50 2.09 1.77 49.669 1904 478 404 358 362 622 98 72 37 2 9 10 2 ,5 0 9 — 97 53 21 12 13 43 130 115 50 18 27 210 300 17.51 14.29 12.86 .73 .81 1.93 1.66 50,385	1897	50	7 496	381	421	669	133	101	54		4	5	5	14	2	22	2	114	81	17	19				182	70	24	38	231	257	22.06	17.70	15.48	1.18	1.36	2.51	2.31	45,464
1900 501 468 364 424 686 102 71 32 — 2 4 2 5 8 11 — 143 77 15 15 10 52 144 140 45 23 35 230 315 20.38 16.57 15.08 .67 1.30 3.01 2.79 47,550 1901 478 459 384 395 674 105 79 79 — 1 7 15 16 9 31 — 114 53 18 17 11 56 163 153 66 32 31 238 259 19.42 16.15 14.51 1.64 .75 2.36 2.13 48,250 1902 479 463 346 397 621 122 103 31 — 7 3 6 5 4 6 — 123 40 18 12 20 63 142 134 59 32 22 201 295 19.42 15.32 13.20 .64 .58 2.53 2.12 48,500 1903 448 456 331 387 607 111 85 48 1 12 7 2 13 7 6 — 104 36 22 12 16 57 138 125 55 19 33 200 286 18.20 14.45 12.74 .97 .50 2.09 1.77 49.669 1904 478 404 358 362 622 98 72 37 2 9 10 2 ,5 0 9 — 97 53 21 12 13 43 130 115 50 18 27 210 300 17.51 14.29 12.86 .73 .81 1.93 1.66 50.385	1898	509	9 470	350	370	659	III	95	40	1-	7	I	3	7	3	19		116	70	17	12	14	56	138	135	50	21	42	230	242	21.21	15.71	13.65	.86	1.26	2.51	2.21	46,149
1901 478 459 384 395 674 105 79 79 — I 7 15 16 9 3I — II4 53 18 I7 II 56 163 153 66 32 3I 238 259 19.42 16.15 14.51 1.64 .75 2.36 2.13 48,250 1902 479 463 346 397 62I 122 103 3I — 7 3 6 5 4 6 — 123 40 18 I2 20 63 142 134 59 32 22 20I 295 19.42 15.32 13.20 .64 .58 2.53 2.12 48,500 1903 448 456 33I 387 607 III 85 48 I 12 7 2 13 7 6 — 104 36 22 12 16 57 138 125 55 19 33 200 286 18.20 14.45 12.74 .97 .50 2.09 1.77 49.669 1904 478 404 358 362 622 98 72 37 2 9 10 2 ,5 0 9 — 97 53 2I I2 I3 43 130 I15 50 I8 27 210 300 17.51 14.29 12.86 .73 .8I 1.93 1.66 50,385	1899	499	9 510	384	432	675	141	112	57	-	4	6	6	15	10	16		142	68	24	18	19	71	165	167	57	24	48	231	289	21.54	17.46	15.03	1.21	1.07	3.03	2.62	46,844
1902 479 463 346 397 621 122 103 31 — 7 3 6 5 4 6 — 123 40 18 12 20 63 142 134 59 32 22 201 295 19.42 15.32 13.20 .64 .58 2.53 2.12 48,500 1903 448 456 331 387 607 111 85 48 1 12 7 2 13 7 6 — 104 36 22 12 16 57 138 125 55 19 33 200 286 18.20 14.45 12.74 .97 .50 2.09 1.77 49.669 1904 478 404 358 362 622 98 72 37 2 9 10 2 ,5 0 9 — 97 53 21 12 13 43 130 115 50 18 27 210 300 17.51 14.29 12.86 .73 .81 1.93 1.66 50,385	1900	50	1 468	364	424	686	102	71	32	-	2	4	2	5	8	II		143	77	15	15	10	52	144	140	45	23	35	230	315	20.38	16.57	15.08	.67	1.30	3.01	2.79	47,550
1903 448 456 331 387 607 111 85 48 1 12 7 2 13 7 6 — 104 36 22 12 16 57 138 125 55 19 33 200 286 18.20 14.45 12.74 .97 .50 2.09 1.77 49.669 1904 478 404 358 362 622 98 72 37 2 9 10 2 5 0 9 — 97 53 21 12 13 43 130 115 50 18 27 210 300 17.51 14.29 12.86 .73 .81 1.93 1.66 50,385	1901	478	8 459	384	395	674	105	79	79		I	7	15	16	9	31		114	53	18	17	II	56	163	153	66	32	31	238	259	19.42	16.15	14.51	1.64	.75	2.36	2.13	48,250
1904 478 404 358 362 622 98 72 37 2 9 10 2 ,5 0 9 — 97 53 21 12 13 43 130 115 50 18 27 210 300 17.51 14.29 12.86 .73 .81 1.93 1.66 50,385	1902	479	9 463	346	397	621	122	103	31		7	3	6	5	4	6	-	123	40	18	12	20	63		134	59	32	22	201		19.42	15.32	13.20	.64	.58	2.53	2.12	48,500
1904 470 404 530 302 002 90 72 37 20 37 30 30 30 30 30 30 30 30 30 30 30 30 30	1903	448	8 456	331	387	607	III	85	48	I	12	7	2	13	7	6		104	36	22		16							200	286	18.20	14.45				2.09	1.77	49.669
1905 478 443 325 369 604 90 79 22 — 6 3 5 1 2 5 — 96 53 22 11 11 44 114 105 44 25 33 188 299 18.02 13.58 12.03 43 .82 1.88 1.66 51,107	1904			358	362	622	98	72	37	2	9	10	2	, 5	0	9		97	53		12	13	43			50			2.5	, i					_			3 /3 3
	1905	478	8 443	325	369	604	90	79	22		6	3	5	, I	2	5	-	96	53	22	II	11	44	114	105	44	25	33	188	299	18.02	13.28	12.03	*43	.82	1.88	1.66	51,107

*Infectious Diseases Hospital built in 1877.



TABLE

Years. Previous and during 1905 District of Whole Statistics Vital

SOUTHPORT. OF BOROUGH COUNTY

				Total Deaths Registered in the	lis Registe	red in the	District.	Total	Deaths of		Nett Deaths at	ths at all
	Population	birtiis.		Under 1 ye	er I year of age.	At all	Ages.		Residents	registered	Ages belonging the District.	onging to strict.
Year.	estimated to middle of each year.	Number.	Rate.*	Number.	Rate per 1000 Births registered	Number.	Rate.*		registered in Priblic Inst'tions in the		Number.	Rate.*
1	23	က	4	ຜ	9	7	œ	9	District.	District.	12	13
1895	44,124	1032	23.38	142	137	799	18.15	49	56	24	797	90.81
9681	44,789	1036	23.13	134	129	683	15.40	47	24	27	989	15.32
1897	45,464	1003	22.06	182	181	802	02.21	50	30	26	862	17.55
8681	46,149	626	21.21	135	138	720	12.21	56	28	31	723	12.66
1899	46,844	1009	21.54	167	165	816	17.46	71	37	30	809	17.27
0061	47,550	696	20.38	140	144	788	16.57	52	23	35	800	16.82
1991	48,250	937	19.42	153	163	779	16.15	56	27	24	276	80.91
1902	48,500	942	19.42	134	142	743	15.32	64	27	30	746	15.38
1903	49,669	904	18.20	125	138	718	14.45	57	29	25	714	14.37
1904	50,385	882	17.51	114	129	720	14.29	51	22	31	729	14.47
Averages for years 1895-1904	47,172	696	20.62	142	146	756	16.12	55	27	28	757	16.09
1905	51,107	921	18.02	103	112	694	13.58	50	20	26	700	13.69

^{*} Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

Note.—The deaths included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public institutions" taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses, and lunatic asylums. A list of the Institutions in respect of the deaths in which corrections have been made is given below.

	At Census of 1901		4233
48,083	9511	5.05	water)
Total population at all ages	Number of Inhabited Houses	Average Number of Persons per House	Area of District in acres (exclusive of area covered by water)

Other Institutions, the deaths in which have been distributed among the several localities in the District.			,			
II. Institutions outside the District receiving sick and infirm persons from the District.	Moss Lane Infectious	Diseases Hospital.	Ormskirk Workhouse.			
I. Institutions within the District receiving sick and infirm persons from outside the District.	Children's Sanatorium.	Convalescent Home.	Convalescent Hospital.	Hydropathic Hospital.	Southport Infirmary.	Bradstock Lockett Home.
			-			



TABLE II.

Vital Statistics of separate Localities in 1905 and previous years.

COUNTY BOROUGH OF SOUTHPORT.

NAMES OF LOCALITIES.		Whole	Distri c t.		1.—Six C the bu	ENTRAL W	ARDS, (being ion of the B	g especially orough.)	2.—Sc (espe	ARISBRICK a cially worki			3.—Par	k Ward (a wai		esidential	tow	sketh War: on and Cros	sens, the n	g Church- nost rural
YEAR.	Population estimated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under I year.
	a.	<i>b</i> .	<i>c</i> .	<i>d</i> .	a.	b.	<i>c</i> .	<i>d</i> .	a.	b.	<i>c</i> .	d.	a.	b.	<i>C</i> .	d.	<i>a</i> .	<i>b</i> .	С.	d.
1895	44,124	1032	797	142																
1896	44,789	1036	686	134		The	present	arrange	ment of	Wards,	out of	which	theabove	localities	are	formed,	was	madein	1898.	
1897	45.464	1003	798	182																
1898	46,149	979	723	135																
1899	46,844	1009	809	167																
1900	47,550	969	800	140	27,911	448	464	56	10,788	384	166	67	4955	32	60	3	3896	105	62	9
1901	48,250	937	776	153	28,322	466	463	81	10,947	350	193	56	5027	22	55	I	3954	99	65	18
1902	48,500	942	746	¹ 34	28,469	459	4 54	62	11,004	358	175	60	5053	27	64	5	3974	98	53	7
1903	49,669	904	714	125	29,155	443	426	61	11,269	333	178	52	5175	34	57	2	4070	94	53	IO
1904	50,385	882	729	115	29,575	421	413	64	11,431	347	184	42	5250	31	68	2	4129	83	64	9
Average of years 1895 to 1904	47,172	969	757	143							-									
1905	51,107	921	700	103	29,999	439	. 424	50	11,595	351	148	37	5325	31	65	1	4188	100	63	12

Note.—(a) The separate localities adopted for this table are areas of which the populations are obtainable from the census returns.

⁽b) Deaths of residents occurring in public institutions beyond the district are included in sub-columns c of this table, and those of non-residents registered in public institutions in the district excluded.

⁽c) Deaths of residents occurring in public institutions, whether within or without the district, are allotted to the respective localities according to the addresses of the deceased. Sub-column c of "whole district" corresponds with column 12 in Table I.



TABLE III.—Cases of Infectious Disease notified during the Year, 1905.

COUNTY BOROUGH OF SOUTHPORT.

		C	ASES NOTIF	ED IN WH	ole Distri	CT.		Тот		NOTIFIED IN	EACH	Number		REMOVED TO H LOCALITY	
Notifiable Disease.	At all	+		At Ages	s—Years.			ı	2	3	4	I	2	3	4
	Ages.	Under 1.	I to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.								
Smallpox	•••	•••	•••	•••	•••		• • •	• • •		• • •	•••	• • •		•	•••
Cholera	•••	• • •		•••	•••	• • •		•••				•••		•••	•••
Diphtheria	31	I	5	18	4	3	* * ^	16	13	2	•••	6	5	•••	• • •
Membranous Croup		•••	•••	* • •	•••		•••							• • •	•••
Erysipelas	22	•••	2	2	I	14	3	14	3	I	4			•••	• • •
Scarlet Fever	247	•••	49	158	26	14		151	70	I 7	9	104	56	IO	7
Typhus Fever	•••	•••	•••		•••	•••		• • • • • • • • • • • • • • • • • • • •	, , , , , , , , , , , , , , , , , , ,		•••				
Typhoid Fever	IO	•••	•••	3	I	6	•••	4	2	3	ı		I	Ţ	•••
Relapsing Fever	•••	•••	•••	• • •	•••	•••	•••	•••							
Continued Fever	I	•••	•••	• • •	I	•••		I		• • •		I	•••		
Puerperal Fever	2	•••	•••	•••	I	ı		I	•••		ı				
Plague	• • •	•••	•••	•••	•••	•••	• • •	• 5 •		• • •			• • •	• • •	•••
Chicken Pox	99	5	36	51	7.	• • •	•••	58	21	17	3			•••	•••
Measles	627	21	277	305	15	9		332	184	22	89	***	•••	•••	•••
Whooping Cough	70	IO	37	22	I			32	29	8	I	•••	•••	•••	•••
Observation Cases		•••	•••		•••			•••				I	I	•••	•••
Totals	1109	37	406	559	57	47	3	609	322	70	108	112	63	II	7

Note.—The localities adopted for this table are the same as those in Tables II. and IV.

Isolation Hospital-Moss Lane Hospital, in the West Lancashire Rural District.



TABLE IV.

Causes of, and Ages at, Death during Year 1905.

	DEA	ATHS IN 0	OR BELONGING 1 SUBJOINED	5 4	WHOLE	District	T AT	DEATHS	IN OR BH	LONGING ALL AG		LOCALITIES	
CAUSES OF DEATH.	All Ages.	Under 1.	r and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and up-wards.	Six Central Wards.	Scarisbrick and Sussex	Scaris- brick Park He and Ward. Wa	Hes- keth Ward.		DEATHS IN PUBLIC INSTITU-
	÷1	ಣ	-	4 ≎	9) (-	×	o	Wards.		12		TIONS IN THE DISTRICT
Small-pox	•		:	:	:	:			:	•	•		
Measles	9	*	4	7	:	•	:	m	7	:	Н	:	2
Scarlet Fever	ς.	•	7	•	Н	•	•	H	¬	:	н	•	~
Whooping Cough	н	Н	:	:	•	:	:	. н	•	•	•	•	, ;
Diphtheria and Membranous Croup	5		3	H	:	:		~	. 7	-			
Croup	:	•	•	:	:	•	:) :	~				•
Typhus	•	•	:	:	•	•				•	•	•	•
Fever - Enteric	72	•		:	H	H	:	Н	: :	: H	•	:	
Other continued	:	•	•	:	•	:	:	•	•				
Epidemic Influenza	٧,	•	•	•	0		n	; <u>}-</u>	H	• •		•	:
Cholera					·		7	4	4	-	×	•	:
різопъ	•	•	:	:	:	•	:	:	:	:	:	:	:
	•	•	:	:	:	:	:	•	•	•	•	•	:
Diarrnœa	5	5	:	:	:	:	:	<u>د</u>	Н	Н	•	:	<i>6</i> •
Enteritis	17	14	H	н	:	:	Н	7		:	m	•	:
Puerperal Fever	н	0 0 0	:	:		:	:	•	•	:	Н	:	:
Erysipelas	:	•	:	:	:	:	:	:	:	:	:	:	•
Other Septic Diseases	H	:		н	:	:	:	•	•	:	Н	•	:
Phthisis	09	:	7	7	OI	44	64	38	15	V	2		0
Other Tubercular Diseases	14	9	C)	<u>H</u>	2	Н	:	7	5	:	8	•	*
Cancer, Malignant Disease	56	•	•	•	Н	56	26	33	6	II	·	:	9
Bronchitis	55	. 2	'n	•	:	OI	35	37	IO	m	5	•	•
Pneumonia	42	9	4	H	н	14	91	29	7	4	8	•	~
Pleurisy	73	:	:	•	:	Н	H	н	н	:	:	:	5
Other Diseases of Respiratory Organs	7	Н	:	•	•	3	<u>ښ</u>	9	:	Н	•	:	
Alcoholism (Cirrhosis of Liver)	12	•	•	•	:	9	9	6	:	3	•	•	:
Venereal Diseases	:	•	:	:	:	:	•	•	:	•	•	•	
Premature Birth	15	15	•	:	:	:	:	∞	4	:	~	•	6 •
Diseases and Accidents of Parturition	9	:	:	:	H	5	:	Н	+	•) Н	:	
Heart Diseases	83	П	н	2	3	39	34	48	17	9	12	:	Õ
Accidents	17	:	4	:	:	7	9	12	7	H	8	:	, 4
Suicides	9	•	:	•	:	9	:	5	Н	:	•	:	Н
All other causes	279	48	15	6	8	79	126	170	59	28	22	:	17
All causes	200	103	44	23	26	245	259	424	148	65	63	•	50
		-	N and	Ofee at	hack								

See Notes at back.

Notes.—(a) In this Table all deaths of "Residents" occurring in Public Institutions, whether within or without the district, are included with the other deaths in the columns for the several age groups (columns 2-8). They are also, in columns 9-12, included among the deaths in their respective "Localities" according to the previous addresses of the deceased as given by the Registrars. Deaths of "Non-residents" in public Institutions in the district are in like manner excluded from columns 2-8 and 9-12 of this Table.

See notes on Table I., as to the meaning of "Residents" and "Non-residents," and as to the "Public Institutions" taken into account for the purposes of these Tables. The "Localities" are the same as those in Tables II. and III. (e)

(c) All deaths occurring in public institutions situated within the district, whether of "Residents" or of "Non-residents," are, in addition to being dealt with as in Note (a), entered in the last column of this Table.

(d) The total deaths in the several "Localities" in columns 9-12 of this Table should equal those for the year in the same localities in Table II., sub-columns "c." The total deaths at all ages in column 2 of this Table should equal the gross total of columns 9-12 and the figures for the year in column 12 of Table I.

(e) Under the heading "Diarrhœa" are included deaths as certified from diarrhœa, alone or in combination with some other cause or ill-defined nature; and also deaths certified as from

Epidemic enteritis;
Zymotic enteritis;
Epidemic diarrhæa. Summer diarrhæa;
Dysentery and dysenteric diarrhæa;
Choleraic diarrhæa, cholera, cholera nostras (in the absence of Asiatic cholera).

Under the heading of "Enteritis" are included those certified as from Gastro-enteritis, Muco-enteritis, and Gastric catarrh, unless from information obtained by enquiry from the certifying practitioner or otherwise there was reason for including such deaths, especially those of infants, under the specific term "Diarrhæa."

Deaths from diarrhæa secondary to some other well-defined disease have been included under the latter.

Infantile Mortality during the Year 1905.

Deaths from stated Causes in Weeks and Months under One Year of Age.

COUNTY BOROUGH OF SOUTHPORT.

	Total Deaths under One Year	97	9	•	:	:	:	H	I	9	12	a	15	8	:	:	77	:	4	7	:	•	:	:	IO	+	:	7	:	13	103	
	stroit 21-11	4	:	:	:	:	:	:		:	:	:	:	:	:	:	:	:	Н		:	÷	:	:	:	H	:		i	Н	4	
ı	sdinold 11-01	H	•	:	•	:	•	:	:	:	:	:	:	:	:	:	:	:	:	:	•	:	•	:	:	•	•		•	H		
	stinoMorths	9	:		:	•	:	:	Н	73	H	:	:	:	:	:	:	:	:	:	:	:	:	:	:	H	•	H	•	:	9	
	sulmold 6-8	7	:		:	:	:	:	:	÷	H	:	:	:	:	:	:	:	•	•	:	:	•	•	•	:	*		•	H	61	
	8-7 Months	∞	:		:	:	:	:	:	:	Н	:	:	:	:	:	۲	:	H	:	:	:	:	•	Н	:	:	8	:	2	∞	
	sdinoM 7-8	5	:		:	:	:	Н	:	Н	3	:	:	:	:	:	:	:	:	*	:	:	:	:	:	•	•	:	:	i	5	
	sdinoM 0-2	4	:	:	:	:	:	:	:	:	Н	:	:	:	:	:	H	:	:	•	:	:	:	:	:	н	:	Н	:		4	
	sdinoM &-4	9	Ι	:	:	:	:	:	:	:	2	:	:	:	÷	:	Н	;	Н	н	:	:	:	:	н	н	:	:	•	•	7	
111	s-4 Months	3	:	:	*	:	:	:	:	Н	:	:	:	:	÷	:	I	:	:	:	÷	:	:	:	Н	:	:	:	:	:	3	
	s-3 Months	5	:	:	:	:	•	:	:	:	:	Н	:	:	:	:	8	:	Н	:	:	:	:	•	:	•	:	:	*	I	ũ	
	stinoM 2-1	12	H	:	:	:	:	:	:	73	3	:	:	:	:	:	73	•	:	Н	:	:	:	•	8	*	:	Ci	*	I	13	
	Total under InoM 1	41	4		÷	:	:	•	:	:	:	Н	15	7	:	:	91	:	:	:	÷	•	:	:	5	:	:	:	:	9	45	
	3-4 Weeks	1	:	:	i	:	:	:	:	:	:	:	Н	:	:	:	5	:	:	i	:	:	:	:	H	:	:	:	:	:	7	
	s-3 _М еекs	4	:	:	:	:	:	:	÷	÷	÷	:	Н	•	:	:	8	÷	:	i	:	•	:	:	Н	*	•	•	•	:	4	76
	1-2 Weeks	5	H		:	:	:	:	:	:	:	H	:	I	•	:	н	:	:	:	i	:	:	:	H	:	:	•	:	7	9	$ \propto$
	Under i week	25	3	:	:	:	:	:	:	i	:	:	13	н	:	•	∞	:	:	÷	:	:	:	:	77	:	:	•	:	4	28	nate
	CAUSE OF DEATH.	(Certified	Uncertified	(Small-pox	Chicken-pox	Measles	Scarlet Fever	Diphtheria: Croup	Whooping Cough	(Diarrhœa, all forms	Enteritis (not Tuberculous)	Gastritis, Gastro-intestinal Catarrh	Premature Birth	Congenital Defects	Injury at Birth	Want of breast-milk	Atrophy, Debility, Marasmus	(Tuberculous Meningitis	Tuberculous Peritonitis: Tabes Mesenterica	Other Tuberculous Diseases.	Erysipelas	Syphilis	Rickets	Meningitis (not Tuberculous).	Convulsions	Bronchitis	Laryngitis	l'neumonia	Suffocation, overlaying	Other Causes		/legitimate
	O	All	Causes.			Common	Infectious Diseases.				Diarrheal	Discuscio.			Wasting Diseases.				Tub'rc'lous. Diseases.													

Births in the year

(illegitimate, 45

Deaths from all Causes at all Ages, 700.

Population (estimated to middle of 1905) 51,107.



TABLE VI.

Showing the total number of cases of Infectious Disease notified in the Borough, and the Deaths resulting therefrom, during the last 10 years (1896-1905). It includes the Deaths which occurred both in the Borough and in the Borough Infectious Diseases Hospital (outside the Borough).

	Number of Cases of Infectious Disease notified.										Deaths from Infectious Disease.												
	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	Total Cases for 10 years, 1896 to 1905.		1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	Total Deaths during 10 years 1896 to 1905.	Case Mortality (of all cases) in Borough and Borough Hospital for 10 years, 1896 to 1905.
Scarlet Fever	475	182	90	177	237	230	131	162	333	247	2264	18	6	3	6	4	7	3	7	10	3	67	2.96 per cent.
Smallpox	•••		•••	•••	I	•••	•••	9	7	•••	17	•••	•••	•••		• • •	• • •	•••	I	2		3	•••
Diphtheria	27	26	18	42	19	59	26	23	36	31		5	6	τ	4	2	12	4	2	2	5	1	16.61 ,,
Membranous Croup		I	2	2	•••	3	4	· · · ·	•••	•••	319	•••	ı	2	2	•••	3	2	• • •			53	•••
Typhus				•••		•••	• • •	•••	I	•••	•••	•••	•••		•••		•••	•••		•••	• • •	•••	••
Typhoid Fever	18	31	56	44	38	33	31	21	10	10	2 92	4	3	6	10	8	9	4	7		2	53	18.15 ,,
Continued Fever	I	• • •	I	•••		I	I	•••	•••	I	5	•••	•••	•••			•••	•••	• • •		•••		•••
Erysipelas	14	16	15	15	19	23	34	39	32	22	22 9	•••	•••	•••		•••	I	I	I		• • •	3	1.31 ,,
Puerperal Fever	6	5	3	2	I	4	3	3	I	2	30	3	I	2	I	•••	I	I	I	I	I	12	10.00
*Chicken Pox	•••				•••		58	194	217	99	•••	•••	• • •	•••	•••	•••	•••		•••		•••		
Measles	• • •	•••	•••	•••		• • •	602	846	504	627	•••	6	4	7	4	2	I	7	12	9	6	58	1.32 ,, †
Whooping Cough					•••	•••	138	537	233	70	•••	8	14	7	15	5	16	5	13	5	I	89	2. 45 ,, †
Totals	54 ^I	261	185	282	315	353	1028	1834	1374	1109	• • •	44	35	28	42	21	50	27	44	29	18	338	* * *

^{*}Chicken Pox, Measles, and Whooping Cough were made compulsorily notifiable on May 8th, 1902.

[†]Calculated for the last four years only, during which time Measles and Whooping Cough have been compulsorily notifiable.



TABLE VII.—Cases of Infectious Disease treated in the Borough Infectious Diseases Hospital during the last 10 years, 1896 to 1905.

							<i>'</i>		1905				
	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	Totals for the 10 years, 1896 to 1905.	of cases treated in	
Scarlet Fever	262	137	60	IOI	147	160	92	121	261	177	1518		•••
Smallpox	•••		***	•••	I	• • •	•••	8	7		16	•••	•••
Diphtheria	2	8	4	13	2	15	6	2	3	II	66	•••	
Typhoid Fever	6	6	22	7	7	14	12	II	I	3	89	• • •	
Continued Fever	I		•••	• • •	/	•••	I		• • •	•••	2	•••	•••
Erysipelas	• • •		2	I	0	• • •	•••		• • •	•••	3	•••	•••
Puerperal Fever					• • •	I		•••	•••		ı	•••	•••
Measles	• • •	I	7	I		• • •					9		•••
German Measles	I		•••	•••	•••	•••	•••	• • •		1	ı	•••	•••
Chicken Pox	• • •		• • •		•••	•••	2	2				•••	•••
Observation Cases	•••					•••			5	2	4	•••	•••
Totals	272	152	95	123	I 57	190	113	144	277	193	1716	•••	•••
Deaths occurred among the above cases as follows:—Scarlet Fever	5	I	2	5	2	+	2	6	8				
Smallpox							,			3	38	2.50 per cent.	3.89 per cent.
Diphtheria	•••	I		2	•••	2		•••	2	•••	2	•••	•••
Typhoid Fever	2	I		- 1	•••		1	•••	•••	•••	6	9.09 ,,	18.58 ,,
Measles			3	2	2	4	1	3	•••	I	19	21.35 ,,	16.74 ,,
Observation Case	• • •	•••	•••	•••	•••	•••	•••	•••	•••	2	2	•••	•••
_	•••		•••			•••	•••	• • •	1+	•••	I	•••	•••
Totals	7	3	5	9	4	10	4	9	II	6	68		

^{*} Obtained by deducting the notifications and deaths of cases treated in the Borough Hospital from the total notifications and deaths of cases of infectious disease in the whole Borough as shown in Table VI.

[†] This case was sent into hospital as Scarlet Fever, but certified there by the Deputy Medical Officer as Septicæmia, following Burns.

